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EXAMINER

ARMSTRONG, ANGELA A

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Paper No. 23

Application Number: 09/213,856
Filing Date: December 17, 1998
Appellant(s): MORGAN ET AL..

J. B. Kraft
Registration No. 19,226
For Appellant

EXAMINER'S ANSWER

Mailed
APR 09 2003
Technology Center 2660

This is in response to the appeal brief filed January 16, 2003.

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(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that all of the claims stand or fall together but, does not provide reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

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(9) Prior Art of Record

5970457	BRANT ET AL	10-1999
5748841	MORIN ET AL	05-1998

(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3, 5-8, 10-13, and 15 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-15 of copending Application No. 09/213,858 in view of Morin (US Patent No. 5,748,841). Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims includes the limitations of predetermining a plurality of speech commands associated with a corresponding plurality of system actions, detecting speech commands and

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words associated with speech commands, displaying speech commands, performing the corresponding system action if a particular command is selected. Application No. 09/213,858 does not teach determining relevant commands or displaying relevant commands based on the detection of non-command speech terms. Refer to Morin et al who teach a computer speech recognition system which receives a speech input from the user, processed the speech input and determines if the speech input is related or representative of valid commands, and identifies to the user said valid system commands applicable to a computer application or program (col. 19, line 20 – col. 20, line 64), for the purpose of allowing users unfamiliar with available commands of an application to progressively build sentences which will have meaning to the application (col. 1, lines 15-20).

Therefore, it would have been obvious to one of ordinary skill at the time of invention to modify the speech recognition system of Application No. 09/213,858 to process speech input to determine if the speech input is related or representative of valid commands, and identify to the user the valid system commands, as taught by Morin et al, for the purpose of allowing users unfamiliar with available commands of an application to progressively build sentences which will have meaning to the application, as also taught by Morin et al.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-3, 5-8, 10-13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brant et al. (US Patent No. 5,386,494), hereinafter referred to as Brant, in view of Morin et al (US Patent No. 5,748,841), hereinafter referred to as Morin.

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Regarding claims 1, 6, and 11, Brant teaches predetermining a plurality of speech commands for respectively initiating each of a corresponding plurality of system actions at col. 6, lines 32-57;

Brant teaches detecting speech commands and non-command speech terms at col. 6. lines 21-30 and col. 2, lines 29-40;

Displaying said speech command is taught by Brant at Figures 7-10, within element 88, item identified as "recognized command".

Brant distinguishes between commands and non-commands, but does not specifically teach associating the non-command speech terms with an associated command and displaying relevant commands based on the non-command speech term. However, associating non-command speech terms with commands and displaying of relevant commands was well known in the art of speech command input systems.

In a similar field of endeavor, Morin teaches a computer speech recognition system, which receives a speech input from the user and processes the speech input and determines if the speech input is related to or representative of valid commands. Specifically, at Figure 3 and col. 15, line 48 continuing to col. 16, line 20, Morin describes the recognition of words (non-command speech terms) and the presentation of a list of words or completion list which corresponds to the beginning words of all valid inputs that are syntactically and semantically correct (which reads on "an associated set of non-command speech terms, each term having relevance to its associated command", since as illustrated in Figure 3, the system recognizes the list of words as non-command speech terms, and uses the syntactic and semantic relationship of the words to successively build an actual or legitimate command, i.e. "no alpha in blue"). The

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system identifies to the user said valid system commands applicable to a computer application or program (col. 19, line 20 – col. 20, line 64), by displaying the actual complete command and providing the user the option of executing the command built from the associated list of words. Morin teaches that the system is advantageous for the purpose of allowing users unfamiliar with available commands of an application to progressively build sentences, which will have meaning to the application (col. 1, lines 15-20).

Therefore, it would have been obvious to one of ordinary skill at the time of invention to modify the speech recognition system for recognizing commands of Brant, to process speech input to determine if the speech input is related or representative of valid commands and identify and display the relevant system commands, as taught by Morin, for the purpose of allowing users unfamiliar with available commands of an application to progressively build sentences which will have meaning to the application, as also taught or suggested by Morin at col. 1, lines 15-20.

Regarding claims 2, 7, and 12, Brant and Morin teach everything as claimed in claims 1, 6, and 11. Additionally, at col. 6, lines 46-51 and col. 6, line 61 continuing to col. 7, line 3, Brant teaches selecting a displayed command to thereby initiate a system action.

Regarding claims 3, 8, and 13, Brant and Morin teach everything as claimed in claims 2, 7, and 12. Additionally, at col. 6, lines 46-51, Brant teaches selecting the displayed command to initiate a system action can be performed via speech command input means.

Regarding claims 5, 10, and 15, Brant and Morin teach everything as claimed in claims 3, 8, and 13. Additionally, at col. 6, line 31 continuing to col. 7, line 20; col. 7, lines 60-65; and col. 10, lines 39-57, Brant teaches a plurality of speech terms used in connection with specific actions of the system. Brant does not specifically teach the details of associating a set of speech

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terms includes a relevance table and a means for associating speech terms with the relevance table. However, providing a listing of relevant speech terms and associating the speech terms with commands was well known in the art of speech recognition systems.

At Figure 3 and col. 15, line 48 continuing to col. 16, line 20 and col. 21, line 49 continuing to col. 22, line 45, Morin describes the recognition of words (non-command speech terms) and the presentation of a list of words or completion list which corresponds to the beginning words of all valid inputs that are syntactically and semantically correct (which reads on “an associated set of non-command speech terms, each term having relevance to its associated command”, since as illustrated in Figure 3, the system recognizes the list of words as non-command speech terms, and uses the syntactic and semantic relationship of the words to successively build an actual or legitimate command, i.e. “no alpha in blue”). The system recognizes the words from the relevance list that the user speaks. The relevance list is based on possible words that are syntactically and semantically correct as determined by the context of the dialog between the user and the system. Using the relevance list, a valid command is developed that the system can then execute. The system identifies to the user said valid system commands applicable to a computer application or program (col. 19, line 20 – col. 20, line 64), by displaying the actual complete command and providing the user the option of executing the command built from the associated list of words. Morin teaches that the system is advantageous for the purpose of allowing users unfamiliar with available commands of an application to progressively build sentences, which will have meaning to the application (col. 1, lines 15-20).

Therefore, it would have been obvious to one of ordinary skill at the time of invention to modify the speech recognition system for recognizing commands of Brant, to process speech

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input to determine if the speech input is related or representative of valid commands via implementing a relevance list or table, such that speech input from the relevance list is used to identify and display associated relevant system commands, as taught by Morin, for the purpose of allowing users unfamiliar with available commands of an application to progressively build sentences which will have meaning to the application, as also taught or suggested by Morin at col. 1, lines 15-20.

(11) *Response to Argument*

Applicant's arguments filed January 16, 2003, have been fully considered but they are not persuasive.

At page 5 of the brief, applicant argues that claims 1-3, 5-8, 10-13, and 15 are unobvious over Brant et al in view of Morin et al. Applicant also argues the Brant reference does not suggest providing for each true command, an associated set of relevant speech terms which are not commands or simultaneously displaying both the recognized true commands as well as the true commands for which a relevant associated speech term was recognized.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this instance, Morin was cited as teaching the recognition of words (non-command speech terms) and the presentation of a list of words or completion list which corresponds to the beginning words of all valid inputs that are

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syntactically and semantically correct (which reads on “an associated set of non-command speech terms, each term having relevance to its associated command”, since as illustrated in Figure 3, the system recognizes the list of words as non-command speech terms, and uses the syntactic and semantic relationship of the words to successively build an actual or legitimate command, i.e. “no alpha in blue”). The system recognizes the words from the relevance list that the user speaks. The relevance list is based on possible words that are syntactically and semantically correct as determined by the context of the dialog between the user and the system. Using the relevance list, a valid command is developed that the system can then execute. Thus, the combination of Brant and Morin provide support for the limitation as claimed of providing for each said plurality of commands, an associated set of non-command speech terms, wherein each term having relevance to its associated command. Further, Brant was cited as teaching displaying recognized commands and Morin was cited as teaching displaying commands based on recognized associated speech terms. Thus, the combination of Brant and Morin provide support for the limitation as claimed of means responsive to a detected non-command speech term having relevance to one of said commands for displaying the relevant command simultaneously with said detected speech command.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., “true commands”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

At page 5 of the Brief, Applicant further argues Morin et al does not make up for the deficiencies of Brant. The Examiner disagrees and in referring applicant to the rejection and arguments above, argues that the teachings of Morin provides support for the limitations as claimed for the recognition of words (non-command speech terms) and the presentation of a list of words which corresponds to the beginning words of all valid inputs that are syntactically and semantically correct, wherein the system recognizes the words from the relevance list that the user speaks. The relevance list is based on possible words that are syntactically and semantically correct as determined by the context of the dialog between the user and the system. Using the relevance list, a valid command is developed that the system can then execute.

At page 6 of the Brief, Applicant argues the teaching of Morin's is too complex to offer one skilled in the art any insight into or suggestion of the invention. Applicant also argues that the Examiner fails to specifically point out where in Morin's "elaborate teaching" is there a suggestion providing for the deficiencies of the Brant teaching. Applicant further argues that applicant fails to see how the teachings of Morin suggests (1) providing for each true command, an associated set of relevant speech terms which are not commands or (2) simultaneously displaying both the recognized true commands as well as the true commands for which a relevant associated speech term was recognized. In response, the Examiner refers to the rejection and the arguments presented above which refer to Morin's teachings (Figure 3 and col. 15, line 48 continuing to col. 16, line 20 and col. 21, line 49 continuing to col. 22, line 45) of command building via recognition of non-command words, wherein the system recognizes speech input from the speaker, such that recognized words from a syntactic, semantic and contextual

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(relevance) list are used (associated with) to build legitimate commands. The words of the list are “possible next” words until a legitimate or accurate command has been built. Thus, a user can utter one of the possible words, such as “no” in the example in Figure 3. For the series of commands using the word “no”, the next possible words are displayed, the user utters the next word and continues until an actual command has been built. This process associates the combinations of possible next words, speech terms, with the actual commands, since the command is built based on the set of speech terms displayed. The system displays the possible next words and the actual or legitimate command. Additionally, at col. 1, lines 15-20, Morin specifically teaches that the system has application in allowing users unfamiliar with available commands of an application to progressively build sentences, which will have meaning to the application. Thus, the teachings of Morin provide support for the limitation as claimed of providing for each said plurality of commands, an associated set of non-command speech terms, wherein each term having relevance to its associated command. Further, since Brant was cited as teaching displaying recognized commands and Morin was cited as teaching displaying commands based on recognized associated speech terms, the combination of Brant and Morin provide support for the limitation as claimed of means responsive to a detected non-command speech term having relevance to one of said commands for displaying the relevant command simultaneously with said detected speech command.

At page 7 of the Brief, Applicant argues the mere common objective with Morin of translating spoken words into commands recognized by the voice recognition computer system should not be sufficient to render the present invention obvious over Morin et al or Morin et al in

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combination with Brant et al. In response, the Examiner argues that Morin teaches providing a list of speech terms associated with a command and displaying the terms and/or the commands was well known.

At page 7 of the Brief, Applicant also argues that the present invention offers a process, which is much simpler than the heuristic process of Morin. Applicant's argument has been fully considered but is not persuasive. The Examiner refers applicant to the rejection and arguments above, and argues that as claimed, the references adequately provide support for the claim limitations. The fact that Morin discloses additional structure not claimed is irrelevant.

At page 7 of the Brief, Applicant argues "the suggestion for combining the Examiner selected elements from Morin et al with the Examiner selected elements of Brant et al does not come from the references but from Applicant's own teaching."

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Further, as indicated in the Final rejection and the rejection above, at col. 1, lines 15-20, Morin specifically teaches that the system has application in

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allowing users unfamiliar with available commands of an application to progressively build sentences, which will have meaning to the application.

Appellant's brief presents arguments relating to the provisional double patenting rejection. This issue relates to petitionable subject matter under 37 CFR 1.181 and not to appealable subject matter. See MPEP § 1002 and § 1201. Therefore, the Examiner maintains the position regarding the Double Patenting rejection.

For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,




Angela A. Armstrong
Examiner
Art Unit 2654

AAA
April 4, 2003


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